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10/673,511	09/30/2003	Ken Matsushita	04329.3154	1656

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EXAMINER

IBRAHIM, MOHAMED

ART UNIT	PAPER NUMBER
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2144

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11/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/673,511	Applicant(s) MATSUSHITA ET AL.	
	Examiner Mohamed Ibrahim	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4, 5, 8, 14, 15 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4, 5, 8-10, 14, 15 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1-7, 11-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites the limitation "determines the minimum one of the size information as a maximum transferable size". It is not clear to the Examiner what is mean by the recited limitation. However, for prosecution purposes, Examiner interprets this to mean not just information about size rather the actual size of the data or packet or frame that is being transferred. Claim 11 includes the phrase "the other (N)", however, claim 11 is an independent claim which mentions not 'N' prior to the use of N'; thus the phrase lacks the proper antecedent bases in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Eydelman et al (Eydelman), U. S. Application Publication Number 2002/0007420 A1. Regarding claim 1, Eydelman discloses a network relaying device (see e.g. [0008]; a plurality of alternative transport providers that provide mechanism for transferring data between application in the network is provided) comprising; a determining unit which detects size information for data transfer of devices including a transmitting-side device arranged on network, a transmitting-side network relaying device connected to the transmitting-side device, a receiving-side network relaying device for performing a relaying operation with the transmitting-side network relaying device, and a receiving-side device connected to the receiving-side network relaying device and arranged on the receiving-side networks, and which determines the minimum one of the size information as a maximum transferable size (see e.g. [0034]-[0035] and [0041]; system provides transport providers that have a determining unit which determines that size of the received data compare to the receive buffers and it finds it to be large, it fragments it and transfer via multiple transport provider devices); and an updating unit which updates a maximum transferable size information of the transmitting-side device based on the maximum transferable size determined by the determining unit (see e.g. [0066]; transport providers uses the "last received sequence of number" for resizing or fragmenting messages to update its information).

Regarding claim 2; Eydelman discloses wherein the size information detected by the determining unit is a receiving buffer size, and wherein the determining unit determines

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the minimum one of the receiving buffer sizes as the maximum transferable size, when the determining unit determines that a request packet received by the network relaying device is aimed at investigating the receiving buffer sizes of the devices (see e.g. Fig. 3 and paragraph [0008]).

Regarding claim 3, Eydelman discloses wherein the size information detected by the determining unit is a usable maximum command size, and wherein the determining unit determines the minimum one of the maximum command sizes as the maximum transferable size, when the determining unit determines that a request packet received by the network relaying device is aimed at investigating the maximum command sizes of the devices (see e.g. paragraph [0027] and [0034]; determines if the received size for the receiving buffer is large enough).

Regarding claim 4, Eydelman discloses wherein the determining unit executes at least the detecting process at the time of activating the network relaying device (see e.g. paragraph [0029]).

Regarding claim 5, Eydelman discloses wherein the determining unit executes at least the detecting process at the time of resetting the bus of the network relaying device (see e.g. paragraph [0047]).

Regarding claim 6, Eydelman discloses wherein the updating unit receives a response

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packet transmitted from the receiving-side device in accordance with a request packet from the transmitting-side device, and updates the response packet to the maximum transferable size determined by the determining unit (see e.g. paragraph [0065] and [0069]).

Regarding claim 7, Eydelman discloses wherein the updating unit receives a response packet transmitted from the receiving-side device in accordance with a request packet from the transmitting-side device, and updates the response packet to the maximum transferable size determined by the determining unit, the updated response packet is transferred to the transmitting-side device so that the transmitting-side device appropriately dividing a transmission packet in accordance with the maximum transferable size (see e.g. paragraph p[0070]-[0077]; explains how the receiving transport providers sends a response back to the sending transport provider).

Claim 8 is substantially the same as claim 1 and is thus rejected for reasons similar to those in rejecting claim 1. Furthermore Eydelman discloses regarding dividing unit which divides a packet received from the transmitting-side device in accordance with the maximum transferable size determined by the determining unit (see e.g. paragraph [0041]; Transport provider gathers statistics on whether the data should be fragmented or resize according to the receiving buffer).

Claims 9 and 10 are substantially the same as claims 2 and 3 and are thus rejected for

reasons similar to those in rejecting claims 2 and 3, respectively.

Claims 11-17 list all the same elements as their corresponding claims 1-7, but in method form rather than system-device form. Therefore, the supporting rationale of the rejections to claims 1-7 applies equally as well to claims 11-17.

Claims 18-20 list all the same elements as claims 8-10, but in method form rather than system-device form. Therefore, the supporting rationale of the rejection to claims 8-10 applies equally as well to claims 18-20.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Ibrahim whose telephone number is 571-270-1132. The examiner can normally be reached on Monday through Friday from 7:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn, Jr. can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MI/

Response to Amendment

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 4-5, 8-10, 14-15, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Eydelman et al (Eydelman), U. S. Application Publication Number 2002/0007420 A1.

Regarding claim 4, Eydelman discloses wherein the determining unit executes at least detecting process at the time of activating the network relaying device (see e.g. paragraph [0029]).

Regarding claim 5, Eydelman discloses wherein the determining unit executes at least detecting process at the time of resetting the bus of the network relaying device (see e.g. paragraph [0047]).

Regarding claim 8, Eydelman discloses a network relaying device (see e.g. [0008]; a plurality of alternative transport providers that provide mechanism for transferring data between application in the network is provided) comprising: a determining unit which

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detects size information for data transfer of devices in a network, the devices including a transmitting-side device arranged on one side of the network, a transmitting-side network relaying device connected to the transmitting-side device, a receiving-side network relaying device for performing a relaying operation with the transmitting-side network relaying device, and a receiving-side device connected to the receiving-side network relaying device and arranged on another side of the networks, and which determines a minimum one of the size information as a maximum transferable size (see e.g. [0034]-[0035] and [0041]; system provides transport providers that have a determining unit which determines that size of the received data compare to the receive buffers and it finds it to be large, it fragments it and transfer via multiple transport provider devices); and dividing unit which divides a packet received from the transmitting-side device in accordance with the maximum transferable size determined by the determining unit (see e.g. paragraph [0041]; Transport provider gathers statistics on whether the data should be fragmented or resize according to the receiving buffer).

Regarding claim 9, Eydelman discloses wherein the size information detected by the determining unit is a receiving buffer size, and wherein the determining unit determines the minimum one of the receiving buffer sizes as the maximum transferable size, when the determining unit determines that a request packet received by the network relaying device is aimed at investigating the receiving buffer sizes of the devices (see e.g. Fig. 3 and paragraph [0008]).

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Regarding claim 10, Eydelman discloses wherein the size information detected by the determining unit is a usable maximum command size, and wherein the determining unit determines the minimum one of the maximum command sizes as the maximum transferable size, when the determining unit determines that a request packet received by the network relaying device is aimed at investigating the maximum command sizes of the devices (see e.g. paragraph [0027] and [0034]; determines if the received size for the receiving buffer is large enough).

Regarding claim 14, Eydelman discloses wherein the detecting process is executed at the time of activating the network relaying device (see e.g. paragraph [0029]).

Regarding claim 15, Eydelman discloses wherein the detecting process is executed at the time of resetting the bus of the network relaying device (see e.g. paragraph [0047]).

Claims 18-20 list all the same elements as claims 8-10, but in method form rather than system-device form. Therefore, the supporting rationale of the rejection to claims 8-10 applies equally as well to claims 18-20.

Response to Arguments

3. Applicant's arguments filed 9/11/2007 have been fully considered but they are not persuasive.

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Applicant argues in substance,

A) Eydelman does not teach determining the minimum one of the size information as a maximum transferable size.

B) Eydelman fails to mention the devices including transmitting-side device arranged on one side of the network, a transmitting-side network relaying device connected to the transmitting-side device, a receiving-side network relaying device for performing a relaying operation with the transmitting-side network relaying device, and a receiving-side device connected to the receiving-side network relaying device and arranged on another side of the network.

C) Eydelman fails to teach a dividing unit which divides a packet received from the transmitting-side device in accordance with the maximum transferable size determined by the determining unit.

In response to the Applicant's argument,

On page 8, Applicant argues, "Such enlarging of data size in Eydelman does not constitute 'which determines the minimum one of the size information as a maximum transferable size,' as recited in amended claim 8." While the act of enlarging the data size itself does not necessarily constitute determining a minimum one of the size information as a maximum transferable size, acts that are required to perform this functionality do require that this determining occurs. The phrase "which determines a minimum one of the size information as a maximum transferable size," as appearing in currently presented claim 8, is interpreted as meaning that at minimum, one of the size

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information is determined, where the size information that is determined is determined as a maximum transferable size, meaning that the maximum transferable size is determined. As Applicant states on page 8, "Eydelman appears to disclose a technique to enlarge a data size when larger data is transmittable." This statement, in itself, is a recognition that Eydelman has some means for determining when "larger data is transmittable." Further, in Eydelman, a resize request is utilized when it is determined that the size of the transmitted data is less than the system is capable of handling (Eydelman: Paragraph [0041]). If Applicant intends for the instant claim to be directed towards some specific subject matter, the instant claim should be amended to clearly recite the subject matter that Applicant intends to claim.

On pages 8-9, Applicant argues that Eydelman fails to teach certain claim elements. However, it is noted that these arguments are with respect to features that were not previously presented and thus never addressed prior to this action. Therefore, Applicant should refer to the rejection of claim 8 above where Examiner addresses the features allegedly not taught in the prior art.

On page 9, Applicant argues that resizing of the receive buffer does not constitute "a dividing unit which divides a packet received from the transmitting side device in accordance with the maximum transferable size determined by the determining unit." Applicant is correct, though, that resizing of the receive buffer does not constitute the dividing unit. However, it is noted that Eydelman fragments the packets according to

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the size of the receive buffers (which is the determined maximum transferable size that was determined, as addressed above). The component that performs this operation to fragment the packet is equivalent to the dividing unit, as in claim 8 (Eydelman: Paragraph [0041], lines 1-3).

Applicant employs broad language, which includes the use of word, and phrases, which have broad meanings in the art. In addition, Applicant has not argued any narrower interpretation of the claim language, nor amended the claims significantly enough to construe a narrower meaning to the limitations. As the claims breadth allows multiple interpretations and meanings, which are broader than Applicant's disclosure, the Examiner is forced to interpret the claim limitations as broadly and as reasonably possible, in determining patentability of the disclosed invention. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir.1993).

Applicant has had an opportunity to amend the claimed subject matter, and has failed to modify the claim language to distinguish over the prior art of record by clarifying or substantially narrowing the claim language. Thus, Applicant apparently intends that a broad interpretation be given to the claims and the Examiner has adopted such in the present and previous Office action rejections. See *In re Prater and Wei*, 162 USPQ 541 (CCPA 1969), and MPEP 2111.

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Failure for Applicant to significantly narrow definition/scope of the claims and supply arguments commensurate in scope with the claims implies the Applicant intends broad interpretation be given to the claims. The Examiner has interpreted the claims with scope parallel to the Applicant in the response, and reiterates the need for the Applicant to more clearly and distinctly defines the claimed invention.

Prior Art of Record

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form PTO-892 (Notice of Reference Cited) for a list of relevant prior art.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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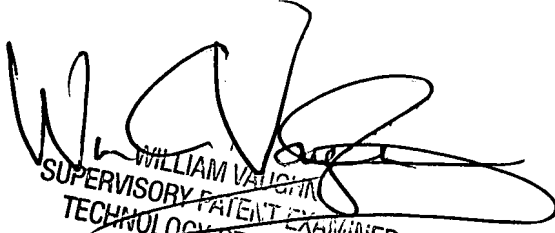
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed Ibrahim whose telephone number is 571-270-1132. The examiner can normally be reached on Monday through Friday from 7:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn, Jr. can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/MII/ 


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